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FEB 25 2002

TECH CENTER 1600/2900



1634

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/614,150

DATE: 02/12/2002

TIME: 13:03:36

Input Set : F:\SEQLIST 43006+2.TXT

Output Set: N:\CRF3\02122002\I614150.raw

ENTERED

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4 <110> APPLICANT: Venter, J. Craig
5   et al.
7 <120> TITLE OF INVENTION: DETECTION KIT, SUCH AS NUCLEIC ACID
8   ARRAYS, FOR DETECTING EXPRESSION OF 10,000 OR MORE
9   DROSOPHILA GENES.
11 <130> FILE REFERENCE: CL000728
C--> 13 <140> CURRENT APPLICATION NUMBER: US/09/614,150
C--> 13 <141> CURRENT FILING DATE: 2000-07-11
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17 <151> PRIOR FILING DATE: 1999-10-19
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20 <151> PRIOR FILING DATE: 1999-10-28
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23 <151> PRIOR FILING DATE: 1999-11-12
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26 <151> PRIOR FILING DATE: 1999-12-28
28 <150> PRIOR APPLICATION NUMBER: 60/175,693
29 <151> PRIOR FILING DATE: 2000-01-12
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32 <151> PRIOR FILING DATE: 2000-02-24
34 <150> PRIOR APPLICATION NUMBER: 60/191,637
35 <151> PRIOR FILING DATE: 2000-03-23
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39 <170> SOFTWARE: FastSEQ for Windows Version 4.0
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42 <211> LENGTH: 2397
43 <212> TYPE: DNA
44 <213> ORGANISM: DROSOPHILA
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49 gcattataat aatataatgc atatcctggg caggcatttg aaagttattg acacctcctc 180
50 ctctgctcac cgctctacct actcccatca cccaacagcc ggtaaaactc gtgacgtgat 240
51 cggtttttgag gcacctacga aggagagtgt tgcaacacag gccagggttc acaaaagctg 300
52 cacgatctgg gcactgggca cccactcccc aatccacaat cccaaccccc actctccatt 360
53 ccaatcctag cttcaatccc agcccaactg gaactgcgga tcgagttcgc gactcggctg 420
54 ccaagtgatt ctgcgcatat tagttggcca ttaggcgcac accattgtca gctgtgaacg 480
55 gcagtcgaaa gcgcattaaa attcagacgg tgttaaatat tacaagcgcc ccctgttgca 540
56 gaaaaggggg aaagggtttcg cgctgatttg cagctgccac tcaagagggt ttttggaggg 600
57 ggtggtgctg cagatcgctg aggagcttgt gaaacgtatt ggcgacgtga tatgttaac 660
58 tttcaggcga aaacgtggag cgttttggat gcggatgttt ggcagacaga aaagcacttg 720

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59 tcggttagac atggttggaa atgaagattc ctcccttttt gatccaatga atgcaatata 780
60 atactttttt tgggtttttac gaaaagcgtt cacttatctt agcacttcgc tttcattgca 840
61 gactggactc actaaatatg tatcttagct ttataggaaa catttttccg caatagttta 900
62 tgctcttcaa aggcttttcag ttggtaatag caatcgcca actgaaaact ttatttaata 960
63 ctgtgtgtgc aattataaac agcataatat gtgtctaaatg ctaacccttt atgttaagaa 1020
64 aagtatcttt ggcattctga accaccaaaa cggatctctt ggcatctggt gtaatgagca 1080
65 cctcgtgata cttgggtacga actctcagta gagtcaaatt ttgggctggc tccattttgg 1140
66 agaggaacgc ctggcacttc tcccgcaaat tgtcatatag acaggcgtac tgcaagccct 1200
67 cctgacgac catcgagggt ttaccggcga cacccgagt attcatgac aatatgtcct 1260
68 ccacgccggg tttctcctgc actttgcgaa atacttcttc cacgtaactt ttagttcgct 1320
69 ttggctgcgt aaagtttaac tatcagttag gatgtaaata catttaacat acttacatct 1380
70 gtctctgctt cctgcatttt gcctacagtt ttttttaaac gtccacaaa tgtactttta 1440
71 gttataaatt ttctaagtca gtaactgctt ggggttgctta aatttgagtt tatgggtatg 1500
72 acattaatgt attggagtac ctigaattga ttgtagttag actcgagtaa aatcgagta 1560
73 attgcgcacc gttattagta tccagccaga agcaaagttt aataaattcc ttgggtatca 1620
74 tcctgtgacg tcataatcac gggcattaga tgatttagtc ggatgccaa cagggccaaa 1680
75 ttaggcggga gttatttgcc aaagcgggct gtaagtctat ggccaactct aatcgtctcc 1740
76 taactcagct gccaaagcat atggacggcc cactttcgag gcgcgtccc agagcataaa 1800
77 gtgcaattat agcgggtgcag cgaggagcag ggccatgaaa taccaacacc cgacagctgt 1860
78 aaacaacaat ttgccgggcg gccggccata agtgcacttc gcatctgaga ccaaatgcc 1920
79 ataactcgcc gtgcgagagc gcttataaaa aagtatttta aaagcccagc caactcggct 1980
80 ggagtccaag agccaaactc aagccaatct caagccaggc caaaccaagc caatccaagc 2040
81 caacaatggc aaatgatgat gagacgtcca gtcgtttcac gttaaacgct aagcgtttcg 2100
82 gcaaacgcgc aaaaagttag acggtgccaa ggagccgact tcactcaaga cgagttgagg 2160
83 atggaaaactt gaatgaaaat acctcgaaca ggagaagcga acgtaatgag caaatttatg 2220
84 gtcaattgat aatttagagg cattcggtat catcaataat ggacccaacc gctgtggctc 2280
85 tggatcgaag atgaggcatt gttattgtta ccaatgtggc gcaaattgtg ctaaattgtt 2340
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88 <210> SEQ ID NO: 2

89 <211> LENGTH: 345

90 <212> TYPE: DNA

91 <213> ORGANISM: DROSOPHILA

93 <400> SEQUENCE: 2

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96 gtgaaaacct cgatggatcg tcaggagggc ttgcagtacg cctgtctata tgacaatttg 180
97 cgggagaagt gccaggcgtt cctctccaaa atggagccag cccaaaattt gactctactg 240
98 agagttcgta ccaagtatca cgagggtgctc attacaccag atgccaaagat caccgttttg 300
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101 <210> SEQ ID NO: 3

102 <211> LENGTH: 114

103 <212> TYPE: PRT

104 <213> ORGANISM: DROSOPHILA

106 <400> SEQUENCE: 3

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107 Met Gln Glu Ala Glu Thr Asp Pro Lys Arg Thr Lys Ser Tyr Val Glu
108 1 5 10 15
109 Glu Val Phe Arg Lys Val Gln Glu Lys Pro Gly Val Glu Asp Ile Leu
110 20 25 30
111 Ile Met Asn His Ser Gly Val Pro Val Lys Thr Ser Met Asp Arg Gln

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112          35          40          45
113 Glu Gly Leu Gln Tyr Ala Cys Leu Tyr Asp Asn Leu Arg Glu Lys Cys
114          50          55          60
115 Gln Ala Phe Leu Ser Lys Met Glu Pro Ala Gln Asn Leu Thr Leu Leu
116 65          70          75          80
117 Arg Val Arg Thr Lys Tyr His Glu Val Leu Ile Thr Pro Asp Ala Lys
118          85          90          95
119 Ile Thr Val Leu Val Val Gln Asn Ala Lys Asp Thr Phe Leu Asn Ile
120          100          105          110
121 Lys Gly
125 <210> SEQ ID NO: 4
126 <211> LENGTH: 4064
127 <212> TYPE: DNA
128 <213> ORGANISM: DROSOPHILA
130 <400> SEQUENCE: 4
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132 cccgctgcac tcctcgatgg cggcactgag ctccagttgg gtcatatgct catttggtg 120
133 catgacgcac tgacctgttt ctaatgcaac aaaaacgtta agcgcctgcc agccactcgc 180
134 agtgcagtca actgtgtcct cttggctcag agagcacagc caccacacca cttgagcgcc 240
135 ccaaatccca tacacccgta taccagctc caccacactt ggccatgttc tttggtgcct 300
136 cgcagccgta gcatactttt ttacgtgtgc tgccggagag tttattttac gcacgccttg 360
137 accagacgac ggaggcggat gcagccttcc actttgcact ccgcaggcaa gtggaaaagt 420
138 caagcggata aacaagagat taaaatgtca taaacaatgc tttttgccac tccggccaag 480
139 caacttaatg aaagccggga aaatgggttt cctccgctgc agctgcaaag tttcaacttc 540
140 aagtttggat ctgaaagcgg agtatctctc gaaactcctg tcgatgcaac tcaataaatt 600
141 tccattaaac ttttgatttg tttccatgac tttttccgcc ctgcaagacc agagaattca 660
142 attgaaattg tttccaaaac aagctacaca aaaagttggt aacaactatt tgaatgccag 720
143 ccaataaatg ggtcttttgc ctatgtgact atattgtaat tcctaataca aatcggagtc 780
144 ggagagacaa taataaggct atatgcacat actttatctt aagctgaaaa acttgtgaat 840
145 tattacatcg aaatcttcaa aagattgatc aagcagtatg ttccaaatat tttttattat 900
146 cgttatagtt acgtttccat tattacgaac atttaaaata tttatttgca ggtaagggca 960
147 tagaaccatc gacttctcga aagtaaaaac ttttcatttg taacacaatt gaaaaaaact 1020
148 ttattttcgt tgggcctgcg aacaacagga ggggtgcaca aatgacaaac tatcatacag 1080
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150 cttcggatta gatttactgc ccatgtgcac acacacacac gcgcgcgctc ttaaacacac 1200
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161 tgtacatggt gttgacggcc gcggactcga gggtgagggt gccgcacgag taagagaacg 1860
162 tggttggggc attcacgccg ctggagcgga agttgttggt gtcgtagacc aaattgctca 1920
163 gactaaagta tccgccatta taaacaacgt caaagggtgat tggcttgctg gcgacagatg 1980
164 tgtccataac aacggatagc ttggtagagc tagagttggt gagcttgagg tcggtgacgg 2040

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166 tccacatgat gccaccggtt gtggcggcgg tgtcacggcg ggtacgacgc tgcaccacag 2160
167 gagccgtgga gggggcggcc aggtacagat aagccacctt gcactcgaac tgcttgctga 2220
168 tagcagctat ggcggcgtct aaatgtgtta aatcattgtt aaattagtgt gtcttattga 2280
169 cgcctttgta gtacgttatt gttgaccac catgtgactc cagactggcc tcccggctct 2340
170 cggcggcgtc ctggaaggtc acaaacaggg ccgtacctac ggcacacttg gccggcgttg 2400
171 tcagctttcc actggcatcg atggagtgtt gctcgcgctt ggcggccact gagcgcagtg 2460
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174 gggaacaaac acatgtgtca caagccctag ctatctaagt gggttctcaa gcacttacgc 2640
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177 gcactcgta cactcacatt caactgggtc aggcgtcac ccacctgtt gctccccaca 2820
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195 ggagggccaa accggcggct tcagcagcgc ctgcaactgc atcgatgcgg tttacacgtg 3900
196 ggtcaatggc tcggtatcca actttattga ggacatccgg cgattcgatg acaagtacga 3960
197 tccctcgcgg ttcgatgaca agaatgagct gcggtactct ctgaggtccc tggaaaaaca 4020
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201 <211> LENGTH: 1863

202 <212> TYPE: DNA

203 <213> ORGANISM: DROSOPHILA

205 <400> SEQUENCE: 5

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208 ttcgtttctc tttgtttcca ttaaaccctc accgaagtaa gcgaatccag cgcgatgttg 180
209 tggaaatcgc tgattgcgtt gtgcgtcatt ggggctgccg tggcggagca aacgcccgtc 240
210 tttttgtggg gagccaacag tgtggcgaaa cctccctga agacgggtgc ccaagtggag 300
211 tttgccgagc agttggctgc attgctggaa gatcacatgg tcgtggcctt cgaggaaaat 360
212 ggcctgagca gcaaggactt cctgtgctcc aactcccagg cgcagtcctg ctacgcccg 420
213 ctgcagggag tgagcccaa gacctactac accagcgtgg agaaccctc ggaggcactg 480
214 cgctcagtg cgcgaagcg cgagcacaac tccatcgatg ccagtggaaa gctgaccacg 540
215 ccggccaagt gtgccgtagg tacggccctg tttgtgacct tcgaggacgc cgccgagagc 600

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218 acccgccgtg acaccgccgc cacaaccggt ggcatcatgt ggaagtcgac caatcagttt 780
219 cagatcttct acactgccct gctctacaac ggcaacccca tcaccgtcac cgacctcaag 840
220 ctcaccaact ctagctctac caagctatcc gttgttatgg acacatctgt cgccgacaag 900
221 ccaatcacct ttgacgttgt ttataatggc ggatacttta gtctgagcaa tttggtctac 960
222 gacaacaaca acttccgctc cagcgccgtg aatgccccaa ccacgttctc ttactcgtgc 1020
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225 tcctgggact gtgtgggctt cgtgacgccc ggtatcctga tgggactgtt tgtggtcgcc 1200
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230 tacacataac acataaccgg gaaattagtc ctcaaatatt gtatcgtatc cgtaattttc 1500
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233 aatgtcgttt atcgaaggaa ctttaaaaga cgcacatgtg tgtgtgtgtt taagagcgcg 1680
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235 tagtttcttg tttggcgcaa atatgcgaga ctaatttatg cctctgtatg atagtgtgtc 1800
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1863

239 <210> SEQ ID NO: 6

240 <211> LENGTH: 379

241 <212> TYPE: PRT

242 <213> ORGANISM: DROSOPHILA

244 <400> SEQUENCE: 6

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248 20 25 30
249 Pro Ser Leu Lys Thr Val Ser Gln Val Glu Phe Ala Glu Gln Leu Ala
250 35 40 45
251 Ala Leu Leu Glu Asp His Met Val Val Ala Phe Glu Glu Asn Gly Leu
252 50 55 60
253 Ser Ser Lys Asp Phe Leu Cys Ser Asn Ser Gln Ala Gln Ser Cys Tyr
254 65 70 75 80
255 Ala Gln Leu Gln Gly Val Ser Pro Lys Thr Tyr Tyr Thr Ser Val Glu
256 85 90 95
257 Asn Pro Ser Glu Ala Leu Arg Ser Val Ala Ala Lys Arg Glu His Asn
258 100 105 110
259 Ser Ile Asp Ala Ser Gly Lys Leu Thr Thr Pro Ala Lys Cys Ala Val
260 115 120 125
261 Gly Thr Ala Leu Phe Val Thr Phe Glu Asp Ala Ala Glu Ser Arg Glu
262 130 135 140
263 Ala Ser Leu Glu Ser His Asp Ala Ala Ile Ala Ala Ile Ser Lys Gln
264 145 150 155 160
265 Phe Glu Cys Lys Val Ala Tyr Leu Tyr Leu Ala Ala Pro Ser Thr Ala
266 165 170 175

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L:13 M:270 C: Current Application Number differs, Replaced Current Application No
L:13 M:271 C: Current Filing Date differs, Replaced Current Filing Date